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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,223	03/05/2002	Roger R. Lesieur	C-2351DIV	1597

7590 10/28/2003

William W. Jones  
Patent Counsel  
6 Juniper Lane  
Madison, CT 06443

EXAMINER
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DOROSHENK, ALEXA A

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 10/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/091,223	Applicant(s) LESIEUR ET AL.	
	Examiner Alexa A. Doroshenk <i>ADD</i>	Art Unit 1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 August 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 3, 4, 8, 12, 13 and 17 continue to be rejected under 35 U.S.C. 103(a) as being unpatentable over Dunster et al. (4,865,820) as presented in paragraph 4 in the office action of June 23, 2003.

4. Claims 5-7, 9-11 and 14-16 continue to be rejected under 35 U.S.C. 103(a) as being unpatentable over Dunster et al. (4,865,820) in view of Grasso et al. (6,274,256 B1) as presented in paragraph 5 in the office action of June 23, 2003.

***Response to Arguments***

Specification

The objection to the disclosure is withdrawn due to applicant's amendment.

§103 Rejections based on Dunster et al. in view of Grasso et al.

Applicant has attempted to disqualify the Grasso et al. reference stating that the instant application and the Grasso et al. application were co-pending and are owned by the same entity.

Applicant has not supplied all of the required evidence to overcome the Grasso et al. reference. Applicant is required to state that the application and the reference were, **at the time the invention was made**, owned by, or subject to an obligation of assignment to the same person. MPEP §103 (c) states (with emphasis added):

(c) Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, **at the time the invention was made**, owned by the same person or subject to an obligation of assignment to the same person.

§103 Rejections based on Dunster et al.

Applicant argues that the result sought by Dunster et al. is not the same result sought by Applicant and cites In re Antonie as providing such a requirement.

First, the examiner notes that neither MPEP §2144.05 II B) nor In re Antonie state that the result sought by of a result effective variable of a claim and that of the prior art must be the same results, as stated by applicant. Nevertheless, the examiner finds that Dunster et al. and the instant invention both use the variable of pressure drop to achieve the same result, mixing of flow streams.

The examiner finds that Dunster et al.'s determination of a sufficient pressure drop is, not only to achieve uniform volumes of gas flow, but also complete mixing of the gas streams (col. 6, lines 50-55).

The examiner notes that in applicant's specification it is stated that the pressure differential is controlled so that, ultimately, thorough mixing of the air and fuel-steam components can be quickly achieved (page 3 of applicant's specification).

The examiner finds that the distance a stream axially flows into the tubes (such as the "one-half of the radius" claimed) is a characteristic which defines an amount of pressure differential rather than an additional step in the method. It is maintained that pressure differential is a recognized result-effective variable and that one of ordinary skill in the art would be able to obtain optimum or workable ranges of said variable as routine experimentation.

Applicant also argues that the examiner's statement that modifying the pressure differential variable to get optimum operation is vague and indefinite "to the nth degree".

The examiner was merely reciting language from the MPEP "result-effective variable" doctrine in disclosing the obviousness to modify a known result-effective variable. It is stated, in the previously cited MPEP section that a particular parameter must first be recognized as a result-effective variable (as the pressure differential is disclosed by Dunster et al.) and then a "determination of the optimum or workable ranges of said variable might be characterized as routine experimentation". The examiner finds that the optimum or workable ranges of said pressure differential to be determinable by routine experimentation.

Applicant argues that the particular pressure differential achieves a "smooth flow stream" which does not produce a turbulent flow pattern nor "plow" into the catalyst bed.

The examiner does not find the disclosure to state a "smooth flow stream", but rather a mixture which "must mix rapidly and thoroughly" (page 2 of applicant's specification). The argument is found to be without merit.

**Conclusion**

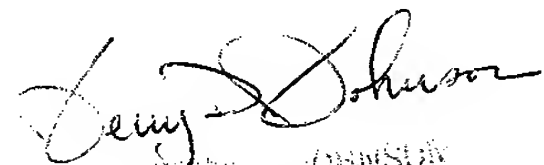
5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexa A. Doroshenk whose telephone number is 703-305-0074. The examiner can normally be reached on Monday - Thursday from 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 703-308-6824. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
EMY D. JOHNSON  
PRIMARY EXAMINER  
GROUP 1100

Application/Control Number: 10/091,223  
Art Unit: 1764

Page 6

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October 21, 2003